My name is Jon Barrilleaux and I live in Oakland California. I am a systems and software engineer with 25 years of experience in aerospace, commercial, and government research and development. Since I vote in Alameda County, and since Alameda County uses Diebold equipment, use of this equipment directly impacts how my vote is counted, in national as well as local elections. I speak to you today because you, the panel members, and you, my county registrar, are asking me to trust your decision that this system will count my vote fairly, accurately, and effectively.

I have only recently begun my investigation into the Diebold voting system. It is quite difficult for a citizen such as myself to conduct an effective assessment of this system. Technical review of the system was severely limited since only one independent consultant was used instead of the three allowed by the election code. The consultant's report on this system, which is supposed to be public record, has been suspiciously redacted. Much of the information about the equipment to be addressed by this meeting was posted late, just a few days ago. And, most daunting of all, this mission critical system is proprietary and closed – the design and code are not open to review.

In spite of these challenges, what I have found so far, thanks in large part to the work of others, is rather disturbing. Simply put: This does not appear to be a robust system suitable for a mission critical application. The staff report recommends that this system is "good enough", but only with various caveats, restrictions, and fixes. This system has the appearance and symptoms of having been cobbled together from disparate pieces, and patched over to form what is at best a prototype. And, according to the consultant's report, it is not even a very good prototype.

I am aware that my county registrars are pressed for time to get a certified voting system. I am also aware of the large investment made by my county for the Diebold equipment. However, in my experience, these can be some of the worst reasons for rushing through qualification of a questionable system, from a company with questionable business and engineering practices. From a business perspective, delivery of a prototype as the final system, in circumstances where the customer is under the gun to accept it, is a recipe for customer dissatisfaction, and ultimate distrust in and disuse of that system by the intended end users -- us the voters. Let's not throw good money after bad.

Recently I attended a meeting held by the Alameda county registrar to discuss implementation of ranked choice voting in the county. A key portion of the discussion revolved around Diebold's proposed costs and foot dragging for implementing such elections. One could draw the conclusion that the will of the voters, to have ranked choice voting, is being held hostage by Diebold. A questionable vendor with a poor product and costly proprietary upgrades should be sufficient cause for seeking a viable alternative, even if that means taking a step backwards and using a simpler and probably cheaper interim solution until a robust system worthy of our trust can be developed. Successful elections were run prior to electronic voting, and they can still be run that way today.

Thank you for allowing me to speak. I urge you to **reject** certification of the Diebold system in its current form.